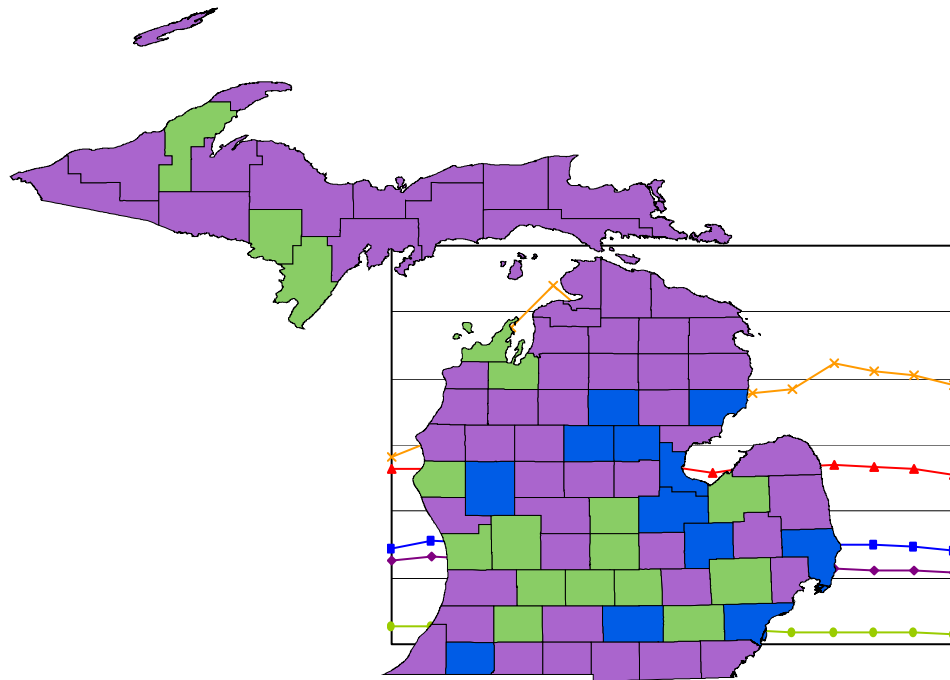


The Cancer Burden in Michigan: Selected Statistics



Developed by the Michigan Public Health Institute (MPHI) in support of the Michigan Cancer Consortium Initiative (MCCI).



Michigan Public
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Background

This report describes the cancer burden in Michigan in terms of morbidity and mortality, and the human and financial costs associated with cancer to the extent to which data are available at this time. Five cancer sites are presented: breast, cervical, colorectal, lung and prostate. Throughout this report, breast cancer statistics refer to female breast cancer only.

Presented in this report are epidemiological analyses of cancer mortality from years 1989 to 2003 and incidence from 1988 to 2002 for the selected cancer sites.¹ Mortality data are from the Michigan Resident Death Files and incidence data are from the Michigan Resident Cancer Incidence File, which are both provided by the Michigan Department of Community Health, Division of Vital Records and Health Statistics.² Michigan rates are compared with national mortality and incidence rates from the SEER Cancer Statistics Review, which is produced by the National Cancer Institute.³ Unless otherwise specified, all incidence and mortality rates referred to in the text are age-adjusted according to the 2000 standard U.S. population.⁴

Also presented are data on the stage at diagnosis for cases reported in Michigan and relative survival rates for the selected cancer sites. Relative survival rates were obtained from the SEER Cancer Statistics Review.

Comparisons of incidence and mortality rates amongst Michigan counties and changes in the percentage of cases diagnosed at an early stage in counties are presented graphically on maps of Michigan.

A summary of data on cancer-related behavioral risk factors is also presented. Behavior data for Michigan residents were obtained from the Michigan Department of Community Health's Behavioral Risk Factor Survey System (BRFSS), the Michigan State Board of Education's Michigan Youth Risk Behavior Survey (YRBS), and the Special Cancer Behavioral Risk Factor Survey (SCBRFS), from the Michigan Department of Community Health and the Michigan Public Health Institute.⁵

¹ Whenever possible, the data quoted in this report are the most recent available. Frequently, there is an 18- to 24-month interval between the time a cancer is diagnosed and the time that information is available from the Michigan Cancer Registry. However, cancer mortality data for any given year generally are available from the Registry within several months after the close of that calendar year. Hence, the cancer-related mortality data that are available often are more recent than the available cancer-related incidence data.

² Michigan Resident Cancer Incidence File including cases processed by November 16, 2004 and Michigan Resident Death Files, Michigan Department of Community Health (MDCH), Division for Vital Records and Health Statistics.

³ Ries LAG, Eisner MP, Kosary CL, Hankey BF, Miller BA, Clegg L, Mariotto A, Feuer EJ, Edwards BK (eds). *SEER Cancer Statistics Review, 1975-2002*, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2002/, based on November 2004 SEER data submission, posted to the SEER web site 2005. A continuing program of the National Cancer Institute (NCI), the SEER program collects data on a routine basis from designated population-based cancer registries in various areas of the country. Trends in cancer incidence, mortality and patient survival in the United States are derived from this database. SEER data are collected from nine or twelve geographic areas that represent, respectively, an estimated 9 or 14% of the US population. The long-term incidence trends and survival data for this report are from five states--Connecticut, Hawaii, Iowa, New Mexico, and Utah--and four metropolitan areas-- Detroit, Atlanta, San Francisco-Oakland, and Seattle-Puget Sound. Additional tables provide more recent incidence rates and trends for SEER from twelve areas (the nine areas above plus Los Angeles, San Jose-Monterey, and the Alaska Native Registry) since 1992. In 2002 Kentucky, Greater California (all remaining uncovered counties), Louisiana and New Jersey all became SEER participants.

⁴ Michigan Department of Community Health (MDCH), Division for Vital Records and Health Statistics.

⁵ Behavioral Risk Factor Surveillance System (1990-2004), Michigan Department of Community Health; 2003 Michigan Youth Risk Behavior Survey, Michigan State Board of Education; 2004 Special Cancer Behavioral Risk Factor Survey, Michigan Department of Community Health and Michigan Public Health Institute.

Analyses of years of life lost due to the selected cancers are presented for Michigan and the United States. Data for the United States were taken from the SEER Cancer Statistics Review, and United States 2002 Life Tables were used to calculate years of life lost in Michigan as well as nationally.⁶

Analyses of some of the financial costs of cancer are presented. Payment data are from Blue Cross Blue Shield of Michigan, Medicare Part A and Medicare Part B.⁷ Hospitalization data are from the statewide hospital discharge database at the Michigan Department of Community Health and from Blue Cross Blue Shield of Michigan.⁸

A graphic presentation of the distribution of mammography and radiation therapy facilities in Michigan is presented. Mammography and radiation therapy facility data were obtained from the Michigan Department of Consumer Industry Services, Radiation Safety Section.⁹ ArcView GIS software was used to analyze the proportion of the population within specified distances of mammography and radiation therapy facilities in Michigan.

The appendices include charts of incidence and mortality rates by county for the cancer sites.

⁶ United States Life Tables, 2002; National Vital Statistics Reports from the Centers for Disease Control and Prevention

⁷ Blue Cross Blue Shield of Michigan, Center for Healthcare Quality; Blue Care Network; Medicare Part A and Medicare Part B from Michigan Peer Review Organization and Wisconsin Physician Service, Medicare Central Data Unit.

⁸ Michigan Resident Hospitalizations Files, Michigan Department of Community Health (MDCH), Division for Vital Records and Health Statistics.

⁹ Michigan Department of Consumer Industry Services, Radiation Safety Section ; "Mammography Facility Status in Michigan" and "Therapy Accelerator Facilities in Michigan", May 9, 2005.